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(54) Termination structure for semiconductor device and process for manufacture thereof

(57) A termination structure for semiconductor devices and a process for fabricating the termination structure are described which prevent device breakdown at the peripheries of the device. The termination structure includes a polysilicon field plate 32a located atop a portion of a field oxide region and which, preferably, overlays a portion of the base region. The field plate may also extend slightly over the edge of the field oxide to square off the field oxide taper. The termination structure occupies minimal surface area of the chip and is fabricated without requiring additional masking steps. A polysilicon layer 32 extends over a gate oxide layer 31 of active cells 100, 101, 103, 104. The structure may be applied to MOSFETs and gate turn-off devices.

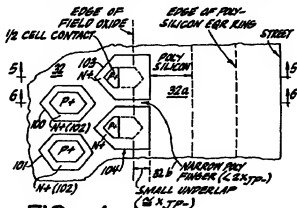


FIG. 4

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